



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/709,804

05/28/2004

John S. Austin

BUR920040027US1

3803

24241

7590

02/04/2005

IBM MICROELECTRONICS  
INTELLECTUAL PROPERTY LAW  
1000 RIVER STREET  
972 E  
ESSEX JUNCTION, VT 05452

EXAMINER

WAMBACH, MARGARET R

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/709,804

Applicant(s)

AUSTIN ET AL.

Examiner

Margaret R. Wambach

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3,5-14 and 17-25 is/are rejected.
- 7) ☒ Claim(s) 11 and 22-24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/15/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

Claims 11, 22, 23 and 24 are objected to because of the following informalities:

In claims 11 and 22, "(LFSR)" should be inserted after the first mention of "a linear feedback shift register" to provide a more direct antecedent for later references to the term, terminology used to refer to the master/slave latch in claim 11 should be made consistent and in claim 23, a second logic stage is mentioned although a first logic stage is not present, in claim 24 "multiplexer" is not spelled in its conventional form. Appropriate correction is required.

### ***Specification***

The disclosure is objected to because of the following informalities: The pages of the specification should be numbered. In paragraph 0005, line 6, is grammatically incorrect (it appears as if "these" should be deleted); in paragraph 0032, the Figure number is missing; paragraph 0039 and paragraph 0086 incorrectly identify Figure 24 as a table; paragraph 0040 incorrectly identifies Figure 25 as a circuit but it is a table. Multiplexer is not spelled in its conventional form throughout the specification.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3, 5-10-14 and 17- 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following terms lack a clear antecedent basis: In claim 3, "the second divider element", in claim 8, "the output" and "the frequency divider", in claim 9, "the programmable frequency divider", in claim 11, "the frequency division output", in claim 13, "the frequency divider" and "the outputs", in claim 14, "the outputs" and "the counter states", in claims 17 and 18, "the second counter element", in claim 19, "the high speed programmable divider" (please note: if the dependency of claim 19 is changed, it is likely that claim 20 must be amended as well), in claim 21, "the first counter" and "the first plurality of latch elements", in claim 22, "the outputs" and in claim 25, "the LFSR counter".

The meaning of the last two lines of claim 10 is not clearly decipherable and thus fail to particularly point out the invention (it appears as if applicant might have intended to insert "divisor of the" before "frequency divider".)

Claims 3, 5-10, 12, 13, 17-21, 23 and 24 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 11, 14, 22 and 25 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claims 1, 2, 4, 15 and 16 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The closest reference of record, Thomson et al., fails to teach the master-slave latch of claims 1 and 11, the pipeline latch element of claim 14 and the first and second counters of claims 15, 22 and 25.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret R. Wambach whose telephone number is (571)272- 1756. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday 6am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571)272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Margaret R Wambach  
Primary Examiner  
Art Unit 2816